Proposed Code Change
State Form 41186R

RETURN TO:
INDIANA DEPARTMENT OF HOMELAND SECURITY
CODE SERVICES SECTION
302 W. Washington Street Room W246
Indianapolis, IN 46204

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Received 3/15/10
Code 50.10.2.1-09

INSTRUCTIONS: *Only TYPED copy accepted.*
(KEY – ~~Dashed line through material to be deleted~~, underline material to be added)
Use second sheet for any material requiring more space.

Code Title	Edition
International Residential Code	2009
Section number and title	Page
R602.10.1.1 and R602.10.4 and R602.10.4.1 and R602.10.5 and R602.10.5.4	159, 173, 180
Proponent	Title
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Address	Phone
9025 N River Rd., Indianapolis IN 46240	317-846-3234

PROPOSED CODE CHANGE (Check One)

☒ Change to read as follows ☐ Add to read as follows ☐ Delete and substitute as follows ☐ Delete without substitution

R602.10.1.1 Braced wall panels. Braced wall panels shall be constructed in accordance with the intermittent bracing methods specified in Section R602.10.2, or the continuous sheathing methods specified in Section R602.10.4 and R602.10.5. Mixing of bracing methods shall be permitted as follows:

1. Mixing of intermittent and continuous bracing methods from story to story is permitted.

2. Mixing of intermittent bracing methods from braced wall line to braced wall line within a story is permitted~~, except that continuous sheathing methods shall conform to the additional requirements of Section R602.10.4 and R602.10.5~~. Within Seismic Design Categories A, B, and C or in regions where the basic wind speed is less than or equal to 100 mph, mixing of intermittent and continuous bracing methods from braced wall line to braced wall line within a story is permitted.

3. Mixing intermittent bracing methods within an intermittent braced wall line is only permitted in Seismic Design Categories A and B, and detached dwellings in Seismic Design Category C. The length of required bracing for the braced wall line with mixed sheathing types shall have the higher bracing length requirement, in accordance with Tables R602.10.1.2(1) and R602.10.1.2(2), of all types of bracing used.

4. Mixing of intermittent and continuous bracing methods within a braced wall line shall not be permitted. Mixing of continuous bracing methods listed in Table R602.10.4.1 shall be permitted along a braced wall line with continuous sheathing. Mixing of CS-SFB with other intermittent and continuous bracing methods within a braced wall line shall not be permitted.

R602.10.4 Continuous sheathing. Braced wall lines with continuous sheathing shall be constructed in accordance with this section. All braced wall lines along exterior walls on the same story shall be continuously sheathed. Mixing of continuous bracing methods shall be in accordance with Section R602.10.1.1.

~~**Exception:** Within Seismic Design Categories A, B, and C or in regions where the basic wind speed is less than or equal to 100 mph, other bracing methods prescribed by this code shall be permitted on other braced wall lines on the same story level or on any braced wall line on different story levels of the building~~.

R602.10.4.1 Continuous sheathing braced wall panels. Continuous sheathing methods require structural panel sheathing to be used on all sheathable surfaces on one side of a braced wall line including areas above and below openings and gable end walls. Braced wall panels shall be constructed in accordance with one of the methods listed in Table R602.10.4.1. Mixing of continuous bracing methods shall be in accordance with Section R602.10.1.1. ~~Different bracing methods, other than those listed in Table R602.10.4.1, shall not be permitted along a braced wall line with continuous sheathing.~~

R602.10.5 Continuously-sheathed braced wall line using Method CS-SFB (structural fiberboard sheathing). Continuously sheathed braced wall lines using structural fiberboard sheathing shall comply with this section. Method CS-SFB shall be limited to dwellings located in Seismic Design Category A and B, detached one- and two-family dwellings located in Seismic Design Category C, and dwellings located where the basic wind speed does not exceed 100mph. All braced wall lines along exterior walls on the same story shall be continuously sheathed. Mixing of continuous bracing methods shall be in accordance with Section R602.10.1.1. ~~Different bracing methods shall not be permitted within a continuously sheathed braced wall line. Other bracing methods prescribed by this code shall be permitted on other braced wall lines on the same story level or on different story levels of the building.~~

5. Delete Section R602.10.5.4 in its entirety.

REASON AND FISCAL IMPACT

These changes were made to correlate mixing of intermittent and continuous bracing methods.

This proposal has two purposes:
1) Unites the rules for mixing of intermittent and continuous sheathing methods under Section R602.10.1.1, instead of being split between three separate sections. As part of this, the text from Section R602.10.5.4 for CS-SFB is editorially revised to match similar language for CS-WSP and relocated into the Section R602.10.5. The reference to the IBC is deleted. Under the IBC, one can either engineer a shear wall or prescriptively apply the wall bracing provisions of Section 2308. While one can design a braced wall line using rational engineering principles, it would be alternate means and methods under the IBC.
2) One technical change to the rules for mixing of continuous bracing methods is proposed. Item #1 under Section R602.10.1.1 permits a dwelling to be constructed with intermittent sheathing on one story and continuous sheathing on a different story, regardless of basic wind speed or seismic design category. The language in the exception to R602.10.4, which was introduced in the 2007 Supplement and reorganized, could be taken to imply this mixing of methods between stories is not permitted in high-wind or high-seismic areas. According to NAHB, this was not the intent of the Ad-Hoc Committee on Wall Bracing. By striking the last sentence of the Exception, it will be clear that Section R602.10.1.1 governs.

REVIEW RECOMMENDATION

Approve

Disapprove

Approve as amended

Further Study